Freight Planning Fact Sheet

Port of Long Beach

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Location & History

The Port of Long Beach (POLB/Port) is located at the south end of the I-710 Freeway and approximately 25 miles south of downtown Los Angeles (LA). Founded in 1911, it is a premier gateway for trade between the United States (US) and Asia. It is the 2nd busiest port by container volume in the U.S. The Port is a public agency managed and operated by the City of Long Beach Harbor Department. It has one of the deepest harbors of any seaport in the world and handles approximately 5,000 vessel calls a year. Port lands are owned by the City in trust for the people of the State of California. In 1911, the California State Legislature approved a Tidelands grant, giving the City the right to manage and develop the Harbor District. Port-related trade generates approximately $140 billion annually and supports more than 1.4 million US jobs.

Port Infrastructure

Channel Depth	76 ft.
Maritime Area	3,200 acres
Container Terminals	6
Waterfront	25 miles
Deepwater Berths	80
Piers	10
Shipping Terminals	22
Post-Panamax Gantry Cranes	66

Port Trade Characteristics

Imports	Exports
Crude oil	Petroleum coke
Electronics	Petroleum bulk
Plastics	Waste paper
Furniture	Chemicals
Clothing	Scrap metal

Major Trading Partners

Imports	Exports
China	China
South Korea	Japan
Hong Kong	Taiwan
Japan	Mexico

Major Trading Partners (Cont.)

Imports	Exports
Ecuador	South Korea

Port Statistics

- 6 .2 million + twenty-foot equivalent unit (TEU) containers in 2012
- In 2012, the Port ranked nineteenth as one of the World's Top Container Ports.
- 2,313 vessel calls were made in 2012
- Ranks first in North America in berth productivity (moves/hour) at 82.6
- Cargo value throughput was valued at $155 billion for 2012
- 660 million square feet of warehouse and distribution facilities within 80 miles of POLB

Trade Corridors Improvement Fund (TCIF) Projects

- Gerald Desmond Bridge Replacement – New Bridge to span main channel (under construction)
- Ports Rail Realignment and Expansion Project – Project will enable Port to move 35 percent of goods via on-dock rail by 2035 (under construction)

Other Port Projects

- Middle Harbor Redevelopment Project – Modernize two aging shipping terminals into one facility (under construction)
- Long Beach Harbor Dredging in partnership with the Army Corps of Engineers - ongoing
- Pier S Marine Terminal Development Project — Develop a currently vacant 160-acre parcel into a new cargo terminal with rail access and
- Back Channel improvements. This project would include the following components: property acquisition; dredging, wharf construction, other waterside improvements, and container cranes; Back Channel improvements; container yard and associated structures; terminal buildings and other structures; truck gates, intermodal railyard, etc.
- I-710 Corridor Improvement Study — Funding partner to analyze potential alternatives and/or improvements for this major freight corridor

Major Port Issues

- Environmental and community health concerns
- International security
- Navigation maintenance – channel dredging
- Freight congestion
- Intermodal road and rail access
- Coastal environmental protection
- Harbor Maintenance Tax Funding for continued dredging and other infrastructure improvements being borrowed against to assist other federal programs and not available for the port to use for its intended purpose
- Unknown impacts of the Panama Canal expansion, scheduled to open in 2014
- Limited capacity and intermodal connections

Caltrans Focus Areas

- Truck vehicle miles traveled estimated to increase over 100 percent by 2030, as a result the highway system's performance will deteriorate significantly.
- Existing roadway and rail capacity, safety, operational, and design constraints
- Analyzing the need and feasibility of a dedicated East-West Freight Corridor
- Most of the Port's trade is simply "through-traffic," which degrades air quality and impacts the region's quality of life, while providing limited regional economic benefits.
- Environmental, community, and health impacts – Diesel engine emissions from marine vessels, trucks, locomotives, cargo-handling equipment – and off-road diesel equipment – as well as noise, light, and vibration have significant impacts on neighboring communities and regional air quality
- Impacts of port expansion projects on the State Highway System

Surface Transportation Network

Access Routes

I-710	I-5	I-110	I-105
I-210	I-405	I-605	SR-57
SR-47	SR-91	SR-60	US 101
SR-103			

Trucking

- 75 percent of all Port-related freight movements are made by truck for at least one segment
- Caltrans District 7 has five of the 10 worst truck bottlenecks in the U.S.
- Limited funding available while Southern California's aging transportation system is at capacity

Rail

- About 40 percent of all containers at the Port of Los Angeles (POLA)/POLB are loaded onto trains via on-dock and off-dock railyards. Of this 40 percent, about 25 percent is loaded via on-dock railyards. It is the policy of the ports to maximize the movement of containers via on-dock rail, and therefore providing supporting and sufficient infrastructure.
- 60 weekly on-dock rail departures from the port a week.
- Rail traffic is estimated to increase from about 95 to 315 trains/per day between now and 2035. To address the increase in traffic, the POLA/POLB developed a comprehensive Rail System Program estimated to cost about $2 billion over the next 10-15 years.

Two Class I Railroads

- Union Pacific (UP) Railroad
- Burlington Northern Santa Fe (BNSF) Railway

Alameda Corridor

- 20 mile train expressway, opened in 2002, connects POLB and POLA to transcontinental railyard in downtown LA (BNSF and UP operating agreement)

Alameda Corridor East

- Extends benefits of Alameda Corridor through construction of safety improvements and 20 grade separations across 70 additional miles of mainline railroad in San Gabriel Valley
- The Port averages over 100 train trips per day – Intermodal yards are reaching capacity, resulting in

time delays moving cargo between trains and trucks

Shortline

- Pacific Harbor Line – Operates 18 miles of track entirely inside POLA/POLB each interfacing with BNSF and UP.

Critical Roadway and Rail Bridges

- Critical roadway and rail bridges for San Pedro Ports: Vincent Thomas Bridge (SR 47), Gerald Desmond Bridge (POLB; soon to be part of SR 710), Badger Avenue Railroad Bridge (POLA), and the Schuyler Heim Bridge (SR 47/103).

Major Railyards

BNSF Railway

- Hobart Yard, located in Commerce near the junction of I-710 and I-5. Largest intermodal railyard in U.S. – processes about 1.2 million containers annually.
- Southern California International Gateway (SCIG) – Proposed new intermodal yard adjacent to the Alameda Corridor near the POLA/POLB would increase use of the Alameda Corridor, reducing the need for trucks to haul containers on I-710 to the Hobart Yard. Project under environmental review.

UP Railroad

- Commerce Yard: Across the street from BNSF's Hobart Yard, facility primarily used for cargo handling – processes over 350,000 containers per year.
- Intermodal Container Transfer Facility (ICTF) and Dolores Yards: five miles from POLA, adjacent to the Alameda Corridor near POLA/POLB. The ICTF is an intermodal facility for moving containers from the ports onto the Alameda Corridor thereby reducing truck trips to Commerce and Industry Yards. Upon completion, UP is expecting to increase the annual average number of containers transferred from truck to rail from the present 725,000 to a projected 1.5 million. The Dolores Yard is an adjacent servicing and switching facility.

Environmental

- San Pedro Bay Clean Air Action Plan (CAAP) – reduce emissions 80 percent by 2014 – $2 billion, 5-year plan began in 2007. Goals set for 2014 have already been achieved. From 2005 to 2011, all the key air pollutants from port-related sources were reduced. Smog-forming nitrogen oxides and sulfur oxides were cut 50 percent and 80 percent (cargo activity did fall by 10 percent in this time period.)
- Clean Trucks Program – As of January 1, 2012, the 11,000 trucks that serve the port terminals are model years 2007 or newer. This program effectively banned older, polluting trucks and reduced diesel pollution 90 percent since 2008.
- Green Port Policy – Port's Green Flag Program is a voluntary vessel speed reduction program that incentivizes vessel operators for slowing down to 12 knots or less within 40 nautical miles (nm) of Point Fermin (near the entrance to the harbor). Ships emit less when they decrease speed. The program has been successful in reducing smog-forming emissions and diesel particulates from ships.
- Port of Long Bridge is making available Alternative Marine Power (AMP) at most of its terminals (also known as cold ironing). When ships provide their own power by using continuously running on-board auxiliary diesel engines, they become one of the largest sources of port-related pollutants including particulate matter, oxides of sulfur and oxides of nitrogen. By the Port providing AMP as an alternative to a ship using its own power, it cuts air pollution from a ship at berth by 95 percent. The Port's international terminals will have AMP by the end of 2013.
- CAAP Technology Advancement Program (TAP) is focused on new and emerging technologies supportive of emission reductions that can be achieved by various technologies. The program facilitates the development and adoption of new technologies throughout the port industry.
- The Port of Long Beach was the first port to use a diesel electric hybrid tugboat.

Key Planning & Partner Agencies

- Alameda Corridor-East Construction Authority and Alameda Corridor Transportation Authority (ACTA)
- California Air Resources Board (CARB)
- Southern California Association of Governments (SCAG)
- South Coast Air Quality Management District

- Federal - United States Department of Transportation (USDOT), US Environmental Protection Agency (USEPA), US Army Corps of Engineers, US States Fish and Wildlife Service, National Marine Fisheries Service, and National Oceanic and Atmospheric Administration, U.S. Customs & Border Patrol
- State – California Transportation Agency, California, Environmental Protection Agency (CalEPA), California Resources Agency (CARB) and Caltrans
- Southern California Consensus Group, a coalition of all the transportation agencies and ports in Southern California, including the five regional transportation planning/programming agencies in the SCAG region.

Sources and Additional Information

- *2013 Los Angeles Trade Numbers*, Port of Los Angeles and Los Angeles World Airports. http://www.portoflosangeles.org/pdf/Los-Angeles-Trade-Numbers-2013.pdf
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- California Clean Trucks Program: http://www.polb.com/environment/cleantrucks/default.asp
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- Intermodal Container Transfer Facility, Project Description. (2013) http://www.ictf-jpa.org/
- PierPASS -- http://pierpass.org/
- Port of Long Beach, http://www.polb.com/
- "On the Move: Southern California Delivers the Goods" (2013), SCAG. http://www.camsys.com/pubs/CRGM_OnTheMove_ExecSummary.pdf
- Southern California National Freight Gateway: http://www.freightcollaboration.org/